



ENVIRONMENT
AGENCY

Permit with introductory note

Pollution Prevention and Control Regulations 2000

Shotton Works

Corus UK Ltd,
Shotton Works,
Deeside,
Flintshire,
CH5 2NH

Permit number

BR7321

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Introductory note

This introductory note does not form a part of the Permit

The following Permit is issued under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I.2000 No.1973), as amended, ("the PPC Regulations") to operate part of an installation carrying out activities covered by the description in Section 1.1 A(1) (a), Section 2.1 A(2) (c) and Section 6.4 A(2) (a) in Part 1 to Schedule 1 of the PPC Regulations, to the extent authorised by the Permit:

Section 1.1 A(1) (a) – "Burning any fuel with a rated input of 50 megawatts or more."

Section 2.1 A(2) (b) – "Applying protective fused metal coatings with an input of more than 2 tonnes of crude steel per hour."

Section 6.4 A(2) (a) - "Unless falling within Part A(1) of this Section, surface treating substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting cleaning or impregnating, in plant with a consumption capacity of more than 150 Kg per year or more than 200 tonnes per year.

Aspects of the operation of the installation which are not regulated by conditions of the Permit are subject to the condition implied by Regulation 12(10) of the PPC Regulations, i.e. the Operator shall use the best available techniques for preventing or, where that is not practicable, reducing emissions from the installation.

Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

In some sections of the Permit conditions require the Operator to use Best Available Techniques (BAT), in each of the aspects of the management of the installation, to prevent and where that is not practicable to reduce emissions. The conditions do not explain what is BAT. In determining BAT, the Operator should pay particular attention to relevant sections of the IPPC Sector guidance, appropriate Horizontal guidance (H1 to H4) and other relevant guidance.

A non-technical description of the installation is given in the Application, but the main features of the installation are as follows. The Installation applies coatings to coiled sheet steel. There are two colour coating lines and two hot dip galvanising lines, the total output from the installation is around 400,000 tonnes per annum. The installation includes facilities for post treatment recoiling and trimming should this be required. The colour coating lines apply a paint coating to the steel and are both equipped with an incinerator or thermal oxidiser to destroy VOCs extracted from the paint application and curing stages. The galvanising lines apply a zinc coating to the steel. There is a central boiler house, whose principal role is to provide back up steam to the coating processes. There is an effluent treatment plant for the removal of metal and metal salts, the treated effluent is discharged to the River Dee. There is an onsite landfill, however the landfill does not form part of this permit at present, it has been de-coupled for the purposes of the application under Regulation 2(12) of Schedule 3 of the Regulations. It is therefore not part of this permit, although it will be brought into the permit by means of a variation when the landfill application falls due.

Note that the Permit requires the submission of certain information to the Agency (see Sections 4 and 5). In addition, the Agency has the power to seek further information at any time under regulation 28 to the PPC Regulations provided that it acts reasonably.

Other PPC Permits relating to this installation

Permit holder	Permit Number	Date of Issue
There are no other PPC Permits relating to this installation.		

Superseded Licences / Authorisations / Consents relating to this installation

Holder	Reference Number	Date of Issue
Corus UK Limited (IPC Authorisation issued by the Environment Agency)	AG6589	19/06/1993
Corus UK Limited (Consent to discharge issued by the Environment Agency)	CM0208101	02/02/1990
Corus UK Limited (LAPC Permit issued by Flintshire County Council)	PP/ 0008	20/04/1993
Corus UK Limited (LAPC Permit issued by Flintshire County Council)	PP/ 0017	02/08/1994
Corus UK Limited (LAPC Permit issued by Flintshire County Council)	PP/ 0035	09/09/1994

Other activities may take place on the site of this installation which are not regulated under this Permit or any other PPC Permit referred to in the Table above. Currently these activities include the operational landfill, which is regulated under other environmental legislation, but will come under PPC regulation later in 2004. The Operator also has a waste exemption license for the infilling of open cellars in redundant parts of buildings.

Public Registers

Considerable information relating to Permits including the Application is available on public registers in accordance with the requirements of the PPC Regulations. Certain information may be withheld from public registers where it is commercially confidential or contrary to national security.

Variations to the Permit

This Permit may be varied in the future (by the Agency serving a Variation Notice on the Operator). If the Operator itself wants any of the Conditions of the Permit to be changed, it must submit a formal Application. The Status Log within the Introductory Note to any such Variation Notice will include summary details of this Permit, variations issued up to that point in time and state whether a consolidated version of the Permit has been issued.

Surrender of the Permit

Before this Permit can be wholly or partially surrendered, an Application to surrender the Permit has to be made by the Operator. For the application to be successful, the Operator must be able to demonstrate to the Agency that there is no pollution risk and that no further steps are required to return the site to a satisfactory state.

Transfer of the Permit or part of the Permit

Before the Permit can be wholly or partially transferred to another person, an Application to transfer the Permit has to be made jointly by the existing and proposed holders. A transfer will be allowed unless the Agency considers that the proposed holder will not be the person who will have control over the operation of the installation or will not comply with the conditions of the transferred Permit. If, however, the Permit authorises the carrying out of a specified waste management activity, the transfer will only be allowed if the proposed holder is also considered to be "a fit and proper person" as required by the PPC Regulations.

Talking to us

Please quote the Permit Number if you contact the Agency about this Permit.

To give a Notification under Condition 5.1.1, the Operator should use the Incident Hotline telephone number (0800 80 70 60) or any other number notified in writing to the Operator by the Agency for that purpose.

Status Log

Detail	Date	Comment
Application BR7321	Received 10/07/03	
Response to request for information	Request dated 12/12/03	Response dated 05/02/04
Permit determined	12/03/04	

End of Introductory Note.



Permit

Permit number

BR7321

The Environment Agency (the Agency) in exercise of its powers under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations (SI 2000 No 1973), hereby authorises

Corus UK Limited ("the Operator"),

Of/ whose Registered Office (or principal place of business) is

30 Millbank,

London,

SW1P 4WY

Company registration number 2280000

to operate an Installation(s) at

Shotton Works

Corus UK Ltd.,

Shotton Works,

Deeside,

Flintshire,

CH5 2NH

to the extent authorised by and subject to the conditions of this Permit.

Signed

Date

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Paula Reynolds

Authorised to sign on behalf of the Agency

Conditions

1 General

1.1 Permitted Activities

1.1.1 The Operator is authorised to carry out the activities and the associated activities specified in Table 1.1.1.

Table 1.1.1

Activity listed in Schedule 1 of the PPC Regulations / Associated Activity	Description of specified activity	Limits of specified activity
Section 1.1 A(1) (a) – Combustion plant of more than 50 MW thermal input.	Operation of gas fired boilers and gas fired radiant space heaters.	Steam raising and distribution, space heating.
Section 2.1 A(2) (b) – Galvanising process.	Applying a fused zinc based alloy coating to steel coils using a hot dip process.	From receipt of raw materials to storage of finished goods, excluding warehousing of incoming and outgoing steel coils.
Section 6.4 A(2) (a) – Coating process.	Applying a solvent based painted coating to steel coils.	From receipt of raw materials to storage of finished goods, excluding warehousing of incoming and outgoing steel coils.
Recoiling and trimming – unlisted directly associated activity.	Post treatment of finished steel coils.	Operation of the recoiling and trimming process.
Effluent Treatment – unlisted directly associated activity.	Removal of metal and metal salts from process effluents and from landfill leachate.	Effluent discharge to River Dee.

1.1.2 Where waste on site is subjected to activities that are exempt from control under the Waste Management Licensing Regulations 1994 then the wastes controlled under condition 1.1.1, above, shall be clearly identified and kept separate from such exempt waste activities and a record shall be kept of where such exempt activities are conducted.

1.2 Site

1.2.1 The activities authorised under condition 1.1.1 shall not extend beyond the Site, being the land shown edged in green on the Site Plan at Schedule 5 to this Permit, which is within the area edged in red on the Site Plan that represents the extent of the installation covered by this Permit.

1.3 Overarching Management Condition

- 1.3.1 Without prejudice to the other conditions of this Permit, the Operator shall implement and maintain a management system, organisational structure and allocate resources that are sufficient to achieve compliance with the limits and conditions of this Permit.

1.4 Improvement Programme

- 1.4.1 The Operator shall complete the improvements specified in Table 1.4.1 by the date specified in that table, and shall send written notification of the date of completion of each requirement to the Agency within 14 days of the completion of each such requirement.

Table 1.4.1: Improvement programme

Reference	Requirement	Date
1	The Operator shall carry out an investigation into those open channels used for conveying treated process effluents, cooling water and surface water within the Site boundary to establish whether they are in hydraulic continuity with the underlying ground water. A report on these investigations shall be submitted to the Environment Agency.	31 st March 2005
2	The Operator shall carry out an investigation into the risk of pollution from mobilising materials present in the sediment in the open channels formerly used for conveying untreated effluents from surface and rain water collected in these channels. A report on these investigations shall be submitted to the Environment Agency.	31 st March 2005
3	The Operator shall examine the feasibility of redirecting the boiler blowdown effluent from the package boiler plant to the effluent plant from Greenwood burn. A report on these investigations shall be submitted to the Environment Agency.	30 th September 2004
4	The Operator shall carry out monitoring of chromium emissions to air from emission points A17, A24, A34 and A36 using a method of sampling and analysis agreed with the Environment Agency. A report shall be made to the Agency on these emissions.	31 st March 2005
5	The Operator shall submit a solvent management plan acceptable to the Environment Agency, using the Guidance provided in Schedule 4 of the Pollution Prevention and Control (Solvent Emissions Directive) (England and Wales) Direction 2002. This plan shall include a calculation of the fugitive emissions value as defined in the said Direction.	30 th December 2004
6	In the event that the fugitive emissions value calculated in improvement condition 5 is found to exceed 10%. The Operator shall submit a reduction scheme which meets the requirements in Schedule 3 of the Pollution Prevention and Control (Solvent Emissions Directive) (England and Wales) Direction 2002.	31 st October 2005

Table 1.4.1: Improvement programme (continued)

Reference	Requirement	Date
7	The Operator shall implement measures, acceptable to the Environment Agency, to protect against small accidental spillages of chromate waste during its transfer to the effluent plant for treatment.	31 st March 2005
8	The Operator shall implement measures, acceptable to the Environment Agency, to limit the consequences of an accidental spillage whilst loading and offloading paint in bulk at the Coatings 3 building.	31 st March 2005
9	As part of the first water minimisation audit carried out under condition 2.4.2, the Operator shall explicitly address the difference in water consumption per tonne of product between Colorcoat line 1 and line 2.	31 st March 2006
10	In respect of the monitoring requirements set out in tables 2.2.5 and 2.10.1 for emissions to water and from the effluent plant. The Operator shall provide a report acceptable to the Agency setting out the monitoring methods, and the accreditation status of the equipment, and / or the monitoring organisation as appropriate for the methods used for both sampling and analysis.	31 st December 2004
11	The Operator shall review the equipment, techniques, personnel and organisations employed for its emissions monitoring programme against the requirements of Condition 2.10.7. The Operator shall provide a report and action plan acceptable to the Agency for achieving these standards.	30 th September 2004
12	The Operator shall include within their site closure environmental toolkit and within their Environmental Management System, proposals / guidance on maintaining the viability of the Tern Lagoon and Shotton Reedbeds SSSI in the event of site closure. The Operator shall make this document available for inspection by the Environment Agency.	30 th September 2004

- 1.4.2 Where the Operator fails to comply with any requirement by the date specified in Table 1.4.1 the Operator shall send written notification of such failure to the Agency within 14 days of such date.

1.5 Minor Operational Changes

- 1.5.1 The Operator shall seek the Agency's written agreement to any minor operational changes under condition 2.1.1 of this Permit by sending to the Agency: written notice of the details of the proposed change including an assessment of its possible effects (including waste production) on risks to the environment from the Permitted Installation; any relevant supporting assessments and drawings; and the proposed implementation date.
- 1.5.2 Any such change shall not be implemented until agreed in writing by the Agency. As from the agreed implementation date, the Operator shall operate the Permitted Installation in accordance with that change, and relevant provisions in the Application shall be deemed to be amended.

- 1.5.3 When the qualification “unless otherwise agreed in writing” is used elsewhere in this Permit, the Operator shall seek such agreement by sending to the Agency written notice of the details of the proposed method(s) or techniques.
- 1.5.4 Any such method(s) or techniques shall not be implemented until agreed in writing by the Agency. As from the agreed implementation date, the Operator shall operate the Permitted Installation using that method or technique, and relevant provisions in the Application (and the Site Protection and Monitoring Programme, as the case may be) shall be deemed to be amended.

1.6 Pre-Operational Conditions

- 1.6.1 There are no pre-operational conditions

1.7 Off-site Conditions

- 1.7.1 There are no off-site conditions

2 Operating conditions

2.1 In-Process Controls

- 2.1.1 The Permitted Installation shall, subject to the conditions of this Permit, be operated using the techniques and in the manner described in the documentation specified in Table 2.1.1, or as otherwise agreed in writing by the Agency in accordance with conditions 1.5.1 and 1.5.2 of this Permit.

Table 2.1.1: Operating techniques

Description	Parts	Date Received
Application	Chapter 2 and Chapter 7 of Annex 6, Annex 7, Annex 9, Annex 10, Annex 11, Annex 12 and Annex 16.	10 th July 2003

- 2.1.2 The Permitted Installation shall, subject to the other conditions of this Permit, be operated using the techniques and in the manner described in the Site Protection and Monitoring Programme submitted under condition 4.1.7 of this Permit (as amended from time to time under condition 4.1.8), or as otherwise agreed in writing by the Agency.

2.2 Emissions

2.2.1 Emissions to Air, (including heat, but excluding Odour, Noise or Vibration) from Specified Points

- 2.2.1.1 This Part 2.2.1 of this Permit shall not apply to releases of odour, noise or vibration.
- 2.2.1.2 Emissions to air from the emission points in Table 2.2.1 shall only arise from the source(s) specified in that Table.

Table 2.2.1 : Emission points to air

Emission point reference or description	Source	Location of emission point
A1 Package Boiler House	Package Boiler No.1	Point A1 on site plan
A2 Package Boiler House	Package Boiler No.2	Point A2 on site plan
A3 Package Boiler House	Package Boiler No.3	Point A3 on site plan
A4 Package Boiler House	Package Boiler No.4	Point A4 on site plan
A5 Coatings 2 Boiler House	Steam Boiler No.1	Point A5 on site plan

Table 2.2.1 : Emission points to air (Continued)

Emission point reference or description	Source	Location of emission point
A6 Coatings 2 Boiler House	Steam Boiler No.2	Point A6 on site plan
A7 Coatings 2 Boiler House	High Pressure Hot Water Boiler No.1	Point A7 on site plan
A8 Coatings 2 Boiler House	High Pressure Hot Water Boiler No.2	Point A8 on site plan
A9 Warehouse Bay 7	High Pressure Hot Water Boiler No.1	Point A9 on site plan
A10 Warehouse Bay 7	High Pressure Hot Water Boiler No.2	Point A10 on site plan
A11 No.1 Colorcoat line	Oven Oxidiser	Point A11 on site plan
A12 No.1 Colorcoat line	Regenerative Thermal Oxidiser	Point A12 on site plan
A13 No.1 Colorcoat line	Coater House Extraction LEV	Point A13 on site plan
A14 No.1 Colorcoat line	Wash Tank Extraction LEV	Point A14 on site plan
A15 No.1 Colorcoat line	Paint Kitchen Extraction LEV	Point A15 on site plan
A16 No.1 Colorcoat line	Pre Clean Extraction LEV	Point A16 on site plan
A17 No.1 Colorcoat line	Chromate Scrubber	Point A17 on site plan
A21 No.2 Colorcoat line	Thermal Oxidiser Unit	Point A21 on site plan
A22 No.2 Colorcoat line	Paint Kitchen Extraction LEV	Point A22 on site plan
A23 No.2 Colorcoat line	Pre Clean Extraction LEV	Point A23 on site plan
A24 No.2 Colorcoat line	Chromate Scrubber	Point A24 on site plan
A31 No.5 Galvanising line	Direct Fired Heater Stack (waste heat boiler not used)	Point A31 on site plan
A32 No.5 Galvanising line	Direct Fired Heater Stack (including waste heat boiler)	Point A32 on site plan
A33 No.5 Galvanising line	Radiant Tube Furnace Stack	Point A33 on site plan
A34 No.5 Galvanising line	Chromate Extraction	Point A34 on site plan
A35 No.6 Galvanising line	Direct Fired Heater and Radiant Tuber Furnace Stack	Point A35 on site plan
A36 No.6 Galvanising line	Chromate Extraction	Point A36 on site plan

Table 2.2.1 : Emission points to air (Continued)

Emission point reference or description	Source	Location of emission point
A41 Effluent Plant	Lime Slaker Vents	Point A41 on site plan

2.2.1.3 The limits for emissions to air for the parameter(s) and emission point(s) set out in Table 2.2.2 shall not be exceeded.

Table 2.2.2 : Emission limits to air and monitoring

Emission point reference	Parameter	Limit (including Reference Period) ^{note 1}	Monitoring frequency	Monitoring method
A1 to A10	Oxides of Nitrogen (as NO ₂)	300 mg/m ³ ^{note 2}	Annual ^{note 4}	ISO10849
A1 to A10	Oxides of Nitrogen (as NO ₂)	450 mg/m ³ ^{note 3}	Annual ^{note 4}	ISO10849
A1 to A10	Particulates	50 mg/m ³ ^{note 3}	Annual ^{note 4}	BS EN 13284-1
A11, A12 & A21	Oxides of Nitrogen (as NO ₂)	100 mg/m ³	Annual	ISO10849
A11, A12 & A21	Carbon monoxide	100 mg/m ³ ^{note 5}	Continuous	ISO12039
A11, A12 & A21	Volatile Organic Carbon (as C)	50 mg/m ³	Annual	BS EN 12619:1999 or BS EN 13526:2001
A21	Isocyanates as NCO	0.1 mg/m ³	Annual	MDHS 25/3 & isokinetic sampling
A31, A32 & A35	Particulates	15 mg/m ³	Annual	BS EN 13284-1

Note 1: See Section 6 for reference conditions

Note 2: Limit under gas firing conditions

Note 3: Limit under oil firing conditions

Note 4: Monitoring only to be undertaken if period of operation exceeds 30 days in any year.

Note 5: Limit based on 24-hour average of 15-minute values

2.2.1.4 No condition applies.

2.2.2 Emissions to water (other than groundwater), including heat, from specified points

2.2.2.1 This Part 2.2.2 of this Permit shall not apply to releases of odour, noise or vibration or to releases to groundwater.

Emissions to Water (other than to Sewer)

2.2.2.2 Conditions 2.2.2.3 - 2.2.2.6 shall not apply to emissions to sewer.

- 2.2.2.3 Emissions to water from the emission point specified in Table 2.2.4 shall only arise from the sources specified in that Table. Emissions shall only take place over a period of 4 hours commencing at high tide.

Table 2.2.4: Emission point to water

Emission Point Reference or description	Source	Receiving Water
W1 – Broken Bank Pumping House	Lagoon collecting all site surface waters and treated process effluent	River Dee

- 2.2.2.4 The limits for the emissions to water for the parameters and emission point set out in Table 2.2.5 shall not be exceeded.

- 2.2.2.5 Where a substance is specified in Table 2.2.5 but no limit is set for it, the concentration of such substance in emissions to water from the relevant emission point shall be no greater than the background concentration.

Table 2.2.5 : Emission limits to water and monitoring

Emission point reference	Parameter	Limit (including Reference Period)	Monitoring frequency	Monitoring method
W1	Flow (4 hours commencing one hour before each high tide)	15,000 m ³ /day	Continuous	Method to be agreed in writing with the Environment Agency.
	Flow at all other times	0	Continuous	
	pH	5 – 9	Spot sample each 4 hour period.	
	Suspended Solids (mg/l)	100	Spot sample each 4 hour period.	
	Chemical Oxygen Demand (mg/l)	200	Spot sample each 4 hour period.	
	Iron (mg/l)	10	Spot sample each 4 hour period.	
	Chromium (mg/l)	0.3	Spot sample each 4 hour period.	
	Mercury (µg/l)	10	Every 3 Months	
	Nickel (mg/l)	0.6	Spot sample each 4 hour period.	
	Zinc (mg/l)	0.8	Spot sample each 4 hour period.	
	Ammoniacal Nitrogen (mg/l)		Spot sample each 4 hour period.	

- 2.2.2.6 No condition applies.

Emissions to sewer

- 2.2.2.7 No emission from the Permitted Installation shall be made to sewer.

2.2.2.8 No condition applies.

2.2.2.9 No condition applies.

2.2.2.10 No condition applies.

2.2.3 Emissions to groundwater

2.2.3.1 No emission from the Permitted Installation shall give rise to the introduction into groundwater of any substance in List I (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)).

2.2.3.2 No emission from within the Permitted Installation shall give rise to the introduction into groundwater of any substance in List II (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)) so as to cause pollution (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)).

2.2.3.3 For substances other than those in List I or II (as defined in the Groundwater Regulations 1998 (SI 1998 No.2746)), the Operator shall use BAT to prevent or where that is not practicable to reduce emissions to groundwater from the Permitted Installation provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.4 Fugitive emissions of substances to air

2.2.4.1 The Operator shall use BAT so as to prevent or where that is not practicable to reduce fugitive emissions of substances to air from the Permitted Installation in particular from:

- storage areas
- buildings
- pipes, valves and other transfer systems
- open surfaces

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.4.2 The Operator shall use BAT so as to prevent or where that is not practicable to reduce emissions of litter from the Permitted Installation provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.5 Fugitive emissions of substances to water and sewer

2.2.5.1 Subject to condition 2.2.5.2 below, the Operator shall use BAT so as to prevent or where that is not practicable to reduce fugitive emissions of substances to water (other than Groundwater) and sewer from the Permitted Installation in particular from:

- all structures under or over ground
- surfacing

- bunding
- storage areas

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

- 2.2.5.2 There shall be no release to water that would cause a breach of an EQS established by the UK Government to implement the Dangerous Substances Directive 76/464/EEC.

2.2.6 Odour

- 2.2.6.1 The Operator shall use BAT so as to prevent or where that is not practicable to reduce odorous emissions from the Permitted Installation, in particular by:

- limiting the use of odorous materials
- restricting odorous activities
- controlling the storage conditions of odorous materials
- controlling processing parameters to minimise the generation of odour
- optimising the performance of abatement systems
- timely monitoring, inspection and maintenance
- employing, where appropriate, an approved odour management plan

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

- 2.2.6.2 No condition applies.

- 2.2.6.3 No condition applies.

2.2.7 Emissions to Land

- 2.2.7.1 This part 2.2.7 of this Permit shall not apply to emissions to groundwater.

- 2.2.7.2 No emission from the Permitted installation shall be made to land.

- 2.2.7.3 No condition applies.

2.2.8 Equivalent Parameters or Technical Measures

- 2.2.8.1 The Operator shall comply with the requirements specified in Table 2.2.11, which supplement or replace emission limit values in accordance with Regulation 12(8) of the PPC Regulations.

Table 2.2.11 Equivalent parameters and technical measures

Parameter or measure	Requirement or description of measure, and frequency if relevant
Combustion Temperature of Thermal Oxidisers on No.1 and No.2 Colorcoat Lines	Continuous Monitoring
Flame failure detection of Thermal Oxidisers on No.1 and No.2 Colorcoat Lines	Continuous Monitoring

2.3 Management

- 2.3.1 A copy of this Permit and those parts of the application referred to in this Permit shall be available, at all times, for reference by all staff carrying out work subject to the requirements of the Permit.

Training

- 2.3.2 The Permitted Installation shall be supervised by staff who are suitably trained and fully conversant with the requirements of this Permit.
- 2.3.3 All staff shall be fully conversant with those aspects of the Permit conditions, which are relevant to their duties and shall be provided with adequate professional technical development and training and written operating instructions to enable them to carry out their duties.
- 2.3.4 The Operator shall maintain a record of the skills and training requirements for all staff whose tasks in relation to the Permitted Installation may have an impact on the environment and shall keep records of all relevant training.

Maintenance

- 2.3.5 All plant and equipment used in operating the Permitted Installation, the failure of which could lead to an adverse impact on the environment, shall be maintained in good operating condition.
- 2.3.6 The Operator shall maintain a record of relevant plant and equipment covered by condition 2.3.5 and for such plant and equipment:
- 2.3.6.1 a written or electronic maintenance programme; and
 - 2.3.6.2 records of its maintenance.

Incidents and Complaints

- 2.3.7 The Operator shall maintain and implement written procedures for:
- 2.3.7.1 taking prompt remedial action, investigating and reporting actual or potential non-compliance with operating procedures or emission limits and if such event occur;
 - 2.3.7.2 investigating incidents, (including any malfunction, breakdown or failure of plant, equipment or techniques, down time, any short term and long term remedial measures and near misses) and prompt implementation of appropriate actions; and
 - 2.3.7.3 ensuring that detailed records are made of all such actions and investigations.

- 2.3.8 The Operator shall record and investigate complaints concerning the Permitted Installation's effects or alleged effects on the environment. The record shall give the date and nature of complaint, time of complaint, name of complainant (if given), a summary of any investigation and the results of such investigation and any actions taken.

2.4 Efficient use of raw materials

- 2.4.1 The Operator shall -
- 2.4.1.1 maintain the raw materials table or description submitted in B2.4 of the Application and in particular consider on a periodic basis whether there are suitable alternative materials to reduce environmental impact;
 - 2.4.1.2 carry out periodic waste minimisation audits and water use efficiency audits. If such an audit has not been carried out in the 2 years prior to the issue of this Permit, then the first such audit shall take place within 2 years of its issue. The methodology used and an action plan for increasing the efficiency of the use of raw materials or water shall be submitted to the Agency within 2 months of completion of each such audit and a review of the audit and a description of progress made against the action plan shall be submitted to the Agency at least every 4 years thereafter; and
 - 2.4.1.3 ensure that incoming water use is directly measured and recorded.

2.5 Waste Storage and Handling

- 2.5.1 The Operator shall design, maintain and operate all facilities for the storage and handling of waste on site such that there are no releases to water or land during normal operation and that emissions to air and the risk of accidental release to water or land are minimised.

2.6 Waste recovery or disposal

- 2.6.1 Waste produced at the Permitted Installation shall be recycled or recovered unless technically and/or economically impossible.
- 2.6.2 The Operator shall maintain the waste recovery or disposal table or description submitted in B2.6 of the Application and in particular identify the best practicable environmental options for waste disposal.
- 2.6.3 The Operator shall maintain and implement a system which ensures that a record is made of the quantity, composition, origin, destination (including whether this is a recovery or disposal operation) and where relevant removal date of any waste that is produced at the Permitted Installation.
- 2.6.4 No condition applies.

2.7 Energy Efficiency

- 2.7.1 The Operator shall produce a report on the energy consumed at the Permitted Installation over the previous calendar year, by 31 January each year, providing the information required by condition 4.1.2.
- 2.7.2 The Operator shall maintain and update annually an energy management system, which shall include, in particular, the monitoring of energy flows and targeting of areas for improving energy efficiency.
- 2.7.3 The Operator shall design, maintain and operate the Permitted Installation so as to secure energy efficiency, taking into account relevant guidance including the Agency's Energy Efficiency Horizontal Guidance Note H2 as from time to time amended. Energy efficiency shall be secured in particular by:
- ensuring that the appropriate operating and maintenance systems are in place;
 - ensuring that all plant is adequately insulated to minimise energy loss or gain;
 - ensuring that all appropriate containment methods, (e.g. seals and self-closing doors) are employed and maintained to minimise energy loss;
 - employing appropriate basic controls, such as simple sensors and timers, to avoid unnecessary discharge of heated water or air;
 - where building services constitute more than 5% of the total energy consumption of the installation, identifying and employing the appropriate energy efficiency techniques for building services, having regard in particular to the Building services part of the Agency's Energy Efficiency Horizontal Guidance Note H2; and
 - maintaining and implementing an energy efficiency plan which identifies energy saving techniques that are applicable to the activities and their associated environmental benefit and prioritises them, having regard to the appraisal method in the Agency's Energy Efficiency Horizontal Guidance Note H2.

2.8 Accident prevention and control

- 2.8.1 The Operator shall maintain and implement when necessary the accident management plan submitted in B2.8 of the Application. The plan shall be reviewed at least every 2 years or as soon as practicable after an accident, whichever is the earlier, and the Agency notified of the results of the review within 2 months of its completion.

2.9 Noise and Vibration

- 2.9.1 The Operator shall use BAT so as to prevent or where that is not practicable to reduce emissions of noise and vibration from the Permitted Installation, in particular by:
- equipment maintenance, e.g. of fans, pumps, motors, conveyors and mobile plant;
 - use and maintenance of appropriate attenuation, eg. silencers, barriers, enclosures;
 - timing and location of noisy activities and vehicle movements;
 - periodic checking of noise emissions, either qualitatively or quantitatively; and
 - maintenance of building fabric,
- provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.
- 2.9.2 Emergency alarms and sirens shall only be tested between the hours of 09.00 and 17.00 Monday to Friday and not on any Public Holiday.
- 2.9.3 No condition applies.

2.10 On-site Monitoring

- 2.10.1 The Operator shall maintain and implement an emissions monitoring programme which ensures that emissions are monitored from the specified points, for the parameters listed in and to the frequencies and methods described in Tables 2.2.2 and 2.2.5, unless otherwise agreed in writing, and that the results of such monitoring are assessed. The programme shall ensure that monitoring is carried out under an appropriate range of operating conditions.
- 2.10.2 The Operator shall carry out environmental or other specified monitoring to the frequencies and methods described in Table 2.10.

Table 2.10.1 : Other monitoring requirements				
Emission point reference or source or description of point of measurement	Substance or parameter	Monitoring frequency	Monitoring method	Other specifications
A1 to A10	Carbon monoxide (mg/m ³)	Annual	ISO 12039	Under gas firing conditions.
A1 to A10	Carbon monoxide (mg/m ³)	Annual	ISO 12039	Under oil firing conditions if period of operation exceeds 30 days in any year.
A1 to A10	Sulphur dioxide (Kg)	Annual	By calculation from sulphur content of fuel oil.	Under oil firing conditions if period of operation exceeds 30 days in any year.

Table 2.10.1 : Other monitoring requirements (continued)

Emission point reference or source or description of point of measurement	Substance or parameter	Monitoring frequency	Monitoring method	Other specifications
A13, A14, A15 & A22	Volatile Organic Carbon (as C) (mg/m ³)	Annual	BS EN 12619:1999 or BS EN 13526:2001	
A31, A32, A33 & A35	Carbon monoxide (mg/m ³)	Annual	ISO 12039	
A31, A32, A33 & A35	Oxides of Nitrogen (as NO ₂) (mg/m ³)	Annual	ISO 10849	
Effluent Plant Discharge	pH	Daily Sample		
Effluent Plant Discharge	Iron (mg/l)	Daily Sample		
Effluent Plant Discharge	Chromium (mg/l)	Daily Sample		
Effluent Plant Discharge	Nickel (mg/l)	Daily Sample	Method to be agreed in writing with the Environment Agency.	
Effluent Plant Discharge	Zinc (mg/l)	Daily Sample		
Effluent Plant Discharge	Mercury (µg/l)	Every 3 months		

Note: See Section 6 for reference conditions

2.10.3 No condition applies.

2.10.4 No condition applies.

2.10.5 The Operator shall notify the Agency at least 14 days in advance of undertaking monitoring and/ or spot sampling, where such notification has been requested in writing by the Agency.

2.10.6 The Operator shall maintain records of all monitoring taken or carried out (this includes records of the taking and analysis of samples instrument measurements (periodic and continual), calibrations, examinations, tests and surveys) and any assessment or evaluation made on the basis of such data.

2.10.7 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme in condition 2.10.1 of this Permit and the environmental or other monitoring specified in condition 2.10.2 shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing.

2.10.8 There shall be provided:

2.10.8.1 safe and permanent means of access to enable sampling/monitoring to be carried out in relation to the emission points specified in Schedule 2 to this Permit, unless otherwise specified in that Schedule; and

- 2.10.8.2 safe means of access to other sampling/monitoring points when required by the Agency.
- 2.10.9 The Operator shall carry out the on-going monitoring identified in the Site Protection and Monitoring Programme submitted under condition 4.1.7, unless otherwise agreed in writing by the Agency.
- 2.10.10 The Operator shall, within 6 months of the issue of this Permit, in accordance with and using the format given in the Land Protection Guidance:
 - 2.10.10.1 collect the site reference data identified in the Site Protection and Monitoring Programme submitted under condition 4.1.7, and
 - 2.10.10.2 report that site reference data to the Agency,
 - unless otherwise agreed in writing by the Agency.

2.11 Closure and Decommissioning

- 2.11.1 The Operator shall maintain and operate the Permitted Installation so as to prevent or minimise any pollution risk, including the generation of waste, on closure and decommissioning in particular by: -
 - 2.11.1.1 attention to the design of new plant or equipment;
 - 2.11.1.2 the maintenance of a record of any events which have, or might have, impacted on the condition of the site along with any further investigation or remediation work carried out; and
 - 2.11.1.3 the maintenance of a site closure plan to demonstrate that the installation can be decommissioned avoiding any pollution risk and returning the site of operation to a satisfactory state.
- 2.11.2 Notwithstanding condition 2.11.1 of this Permit, the Operator shall carry out a full review of the Site Closure Plan at least every 4 years.
- 2.11.3 The site closure plan shall be implemented on final cessation or decommissioning of the Permitted activities or part thereof.
- 2.11.4 The Operator shall give at least 30 days written notice to the Agency before implementing the site closure plan.

2.12 Multiple Operator installations

- 2.12.1 This is not a multi-Operator installation

2.13 Transfer to effluent treatment plant

- 2.13.1 Transfers to the effluent treatment plant shall occur only from the points specified in Table 2.13.1 and transfers from those points shall arise only from the sources and shall be released only to the treatment plant specified in that Table.

Table 2.13.1 Transfer points to effluent treatment plant

Transfer point description/ identifier	Source	Effluent Treatment Plant
E1 – Coatings 2 Building	Colorcoat Line 1	Site Effluent Treatment Plant described in Annex 12 of the application.
E2 – Coatings 2 Building	Galvanising Lines 5 & 6	
E3 – Coatings 3 Building	Colorcoat Line 2	
E4 – Package Boiler Plant	Boiler Blow Down	
E5 – On-Site Landfill	Leachate	

2.13.2 All transfers to the effluent treatment plant shall be either by means of pipelines or tanker; the use of open channels for the transfer of untreated process effluents shall not be made.

2.13.3 There are no specific controls imposed on transfers to the effluent treatment plant.

3 Records

- 3.1 The Operator shall ensure that all records required to be made by this Permit and any other records made by it in relation to the operation of the Permitted Installation shall: -
- 3.1.1 be made available for inspection by the Agency at any reasonable time;
 - 3.1.2 be supplied to the Agency on demand and without charge;
 - 3.1.3 be legible;
 - 3.1.4 be made as soon as reasonably practicable;
 - 3.1.5 indicate any amendments, which have been made and shall include the original record wherever possible;
 - 3.1.6 be retained at the Permitted Installation, or other location agreed by the Agency in writing, for a minimum period of 4 years from the date when the records were made, unless otherwise agreed in writing; and
 - 3.1.7 where they concern the condition of the site of the Installation or are related to the implementation of the Site Protection and Monitoring Programme, be kept at the Permitted Installation, or other location agreed by the Agency in writing, until all parts of the Permit have been surrendered.

4 Reporting

- 4.1.1 All reports and written and or oral notifications required by this Permit and notifications required by Regulation 16 of the PPC Regulations shall be made or sent to the Agency using the contact details notified in writing to the Operator by the Agency.
- 4.1.2 The Operator shall, unless otherwise agreed in writing, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows: -
 - 4.1.2.1 in respect of the parameters and emission points specified in Table S2 to Schedule 2;
 - 4.1.2.2 for the reporting periods specified in Table S2 to Schedule 2 and using the forms specified in Table S3 to Schedule 3;
 - 4.1.2.3 giving the information from such results and assessments as may be required by the forms specified in those Tables; and
 - 4.1.2.4 to the Agency within 28 days of the end of the reporting period.
- 4.1.3 The Operator shall submit to the Agency a report on the performance of the Permitted Installation over the previous year, by 31 January each year, providing the information listed in Tables S4.1 and S4.2 of Schedule 4, assessed at any frequency specified therein, and using the form specified in Table S3 to Schedule 3.
- 4.1.4 The Operator shall review fugitive emissions, having regard to the application of Best Available Techniques, on an annual basis, or such other period as shall be agreed in writing by the Agency, and a summary report on this review shall be sent to the Agency detailing such releases and the measures taken to reduce them within 3 months of the end of such period.
- 4.1.5 Where the Operator has a formal environmental management system applying to the Permitted Installation which encompasses annual improvement targets the Operator shall, not later than 31 January in each year, provide a summary report of the previous year's progress against such targets.
- 4.1.6 The Operator shall, within 6 months of receipt of written notice from the Agency, submit to the Agency a report assessing whether all appropriate preventive measures continue to be taken against pollution, in particular through the application of the best available techniques, at the installation. The report shall consider any relevant published technical guidance current at the time of the notice which is either supplied with or referred to in the notice, and shall assess the costs and benefits of applying techniques described in that guidance, or otherwise identified by the Operator, that may provide environmental improvement.
- 4.1.7 The Operator shall, within six months of the date of this permit, submit a detailed Site Protection and Monitoring Programme, in accordance with and using the appropriate template format given in the Land Protection Guidance.
- 4.1.8 The Operator shall maintain the Site Protection and Monitoring Programme (SPMP) submitted under condition 4.1.7, and shall carry out regular reviews of it. The results of such reviews and any changes made to the SPMP shall be reported to the Agency within 1 month of the review or change.

5 Notifications

5.1.1 The Operator shall notify the Agency **without delay** of: -

- 5.1.1.1 the detection of an emission of any substance, which exceeds any limit or criterion in this Permit, specified in relation to the substance;
- 5.1.1.2 the detection of any fugitive emission which has caused, is causing or may cause significant pollution unless the quantity emitted is so trivial that it would be incapable of causing significant pollution;
- 5.1.1.3 the detection of any malfunction, breakdown or failure of plant or techniques which has caused, is causing or has the potential to cause significant pollution; and
- 5.1.1.4 any accident, which has caused, is causing or has the potential to cause significant pollution.

5.1.2 The Operator shall submit written confirmation to the Agency of any notification under condition 5.1.1, by sending: -

- 5.1.2.1 the information listed in Part A of Schedule 1 to this Permit within 24 hours of such notification; and
- 5.1.2.2 the more detailed information listed in Part B of that Schedule as soon as practicable thereafter;

and such information shall be in accordance with that Schedule.

5.1.3 The Operator shall give written notification as soon as practicable prior to any of the following:-

- 5.1.3.1 permanent cessation of the operation of part or all of the Permitted Installation;
- 5.1.3.2 cessation of operation of part or all of the Permitted Installation for a period likely to exceed 1 year; and
- 5.1.3.3 resumption of the operation of part or all of the Permitted Installation after a cessation notified under condition 5.1.3.2.

5.1.4 The Operator shall notify the Agency, as soon as reasonably practicable, of any information concerning the state of the Site which adds to that provided to the Agency as part of the Application or to that in the Site Protection and Monitoring Programme submitted under condition 4.1.7 of this Permit.

5.1.5 The Operator shall notify the following matters to the Agency in writing within 14 days of their occurrence: -

- 5.1.5.1 where the Operator is a registered company: -
 - any change in the Operator's trading name, registered name or registered office address;
 - any change to particulars of the Operator's ultimate holding company (including details of an ultimate holding company where an Operator has become a subsidiary)
 - any steps taken with a view to the Operator going into administration, entering into a company voluntary arrangement or being wound up;
- 5.1.5.2 where the Operator is a corporate body other than a registered company:
 - any change in the Operator's name or address;
 - any steps taken with a view to the dissolution of the Operator.
- 5.1.5.3 In any other case: -

Notifications

- the death of any of the named Operators (where the Operator consists of more than one named individual);
- any change in the Operator's name(s) or address(es);
- any steps taken with a view to the Operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case them being in a partnership, dissolving the partnership;

5.1.6 Where the Operator has entered into a Climate Change Agreement with the Government, the Operator shall notify the Agency within one month of: -

5.1.6.1 a decision by the Secretary of State not to re-certify that Agreement.

5.1.6.2 a decision by either the Operator or the Secretary of State to terminate that agreement.

5.1.6.3 any subsequent decision by the Secretary of State to re-certify such an Agreement.

5.1.7 Where the Operator has entered into a Direct Participant Agreement in the Emissions Trading Scheme which covers emissions relating to the energy consumption of the activities, the Operator shall notify the Agency within one month of:-

5.1.7.1 a decision by the Operator to withdraw from or the Secretary of State to terminate that agreement.

5.1.7.2 a failure to comply with an annual target under that Agreement at the end of the trading compliance period.

5.1.8 The Operator shall notify the Agency in writing of, any known or planned introduction or material change in respect of emissions to water, that may increase or introduce into the effluent any "dangerous substance" as defined in list I and list II of the dangerous substances directive 76/464/EEC and its daughter directives.

6 Interpretation

6.1.1 In this Permit, the following expressions shall have the following meanings:-

"Application" means the application for this Permit, together with any response to a notice served under Schedule 4 to the PPC Regulations and any operational change agreed under the conditions of this Permit.

"Background concentration" means such concentration of that substance as is present in:

- water supplied to the site; or
- where more than 50% of the water used at the site is directly abstracted from ground or surface water on site, the abstracted water; or
- where the Permitted Installation uses no significant amount of supplied or abstracted water, the precipitation on to the site.

"BAT" means best available techniques means the most effective and advanced stage of development of activities and their methods of operation which indicates the practical suitability of particular techniques to prevent and where that is not practicable to reduce emissions and the impact on the environment as a whole. For these purposes: "available techniques" means "those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the operator"; "best" means "in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole" and "techniques" "includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned." . In addition, Schedule 2 of the PPC Regulations has effect in relation to the determination of BAT.

"Fugitive emission" means an emission to air or water (including sewer) from the Permitted Installation which is not controlled by an emission or background concentration limit under conditions 2.2.1.3, 2.2.2.4, 2.2.2.5, 2.2.2.8 or 2.2.2.9 of this Permit.

"Groundwater" means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"Land Protection Guidance" means the version of the Agency guidance note "H7 - Guidance on the Protection of Land under the PPC Regime: Application Site Report and Site Protection and Monitoring Programme", including its appended templates for data reporting, which is current at the time of issue of the Permit.

" $L_{Aeq,T}$ " means the equivalent continuous A-weighted sound pressure level in dB determined over time period, T.

" $L_{A90,T}$ " means the A-weighted sound pressure level in dB exceeded for 90% of the time period, T.

" L_{AFmax} " means the maximum A weighted sound level measurement in dB measured with a fast time weighting.

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"Monitoring" includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.

"Permitted Installation" means the activities and the limits to those activities described in Table 1.1.1 of this Permit.

Interpretation

"PPC Regulations" means the Pollution, Prevention and Control (England and Wales) Regulations SI 2000 No.1973 (as amended) and words and expressions defined in the PPC Regulations shall have the same meanings when used in this Permit save to the extent they are specifically defined in this Permit.

"Sewer" means sewer within the meaning of section 219(1) of the Water Industry Act 1991.

"Staff" includes employees, directors or other officers of the Operator, and any other person under the Operator's direct or indirect control, including contractors.

"Year" means calendar year ending 31 December.

6.1.2 Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

6.1.3 Unless otherwise stated, any references in this Permit to concentrations of substances in emissions into air means: -

6.1.3.1 in relation to gases from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and 11% dry for thermal oxidation.

6.1.3.2 in relation to gases from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

6.1.4 Where any condition of this Permit refers to the whole or parts of different documents, in the event of any conflict between the wording of such documents, the wording of the document(s) with the most recent date shall prevail to the extent of such conflict.

Schedule 1 - Notification of abnormal emissions

This page outlines the information that the Operator must provide to satisfy conditions 5.1.1 and 5.1.2 of this Permit.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the PPC Regulations.

Part A

Permit Number	BR7321
Name of Operator	Corus UK Limited
Location of Installation	Corus Colors Shotton Works, Deeside, Flintshire, CH5 2NH
Location of the emission	
Time and date of the emission	

Substance(s) emitted	Media, e.g. air, groundwater	Best estimate of the quantity or the rate of emission	Time during which the emission took place

Measures taken, or intended to be taken, to stop the emission	
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Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment or harm which has been or may be caused by the emission	
The dates of any unauthorised emissions from the installation in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of Corus UK Limited

Schedule 2 - Reporting of monitoring data

Parameters, for which reports shall be made, in accordance with conditions 4.1.2 and 4.1.3 of this Permit, are listed below.

Table S2: Reporting of monitoring data				
Parameter	Emission point	Reporting period	Period begins	
Sulphur dioxide (Kg)	A1 to A10	Annually	Date of issue of Permit ^{note 4}	See Note 1
Oxides of nitrogen (as NO ₂) (mg/m ³)	A1 to A10,	Annually	Date of issue of Permit ^{note 4}	See Note 2
Carbon monoxide (mg/m ³)	A1 to A10	Annually	Date of issue of Permit ^{note 4}	See Note 2
Oxides of nitrogen (as NO ₂) (mg/m ³)	A1 to A10	Annually	Date of issue of Permit ^{note 4}	See Note 3
Particulates (mg/m ³)	A1 to A10	Annually	Date of issue of Permit ^{note 4}	See Note 3
Carbon monoxide (mg/m ³)	A1 to A10	Annually	Date of issue of Permit ^{note 4}	See Note 3
Oxides of nitrogen (as NO ₂) (mg/m ³)	A11, A12, A21, A31, A32, A33 and A35	Annually	Date of issue of Permit ^{note 4}	
Particulates (mg/m ³)	A31, A32, A33 and A35	Annual	Date of issue of Permit ^{note 4}	
Carbon monoxide (mg/m ³)	A11, A12, and A21	Annual	Date of issue of Permit ^{note 4}	
VOCs (mg/m ³)	A11 to A15, A21 and A22	Annual	Date of issue of Permit ^{note 4}	
Isocyanates as NCO (mg/m ³)	A21	Annual	Date of issue of Permit ^{note 4}	
Flow (m ³ /day)	W1	Every 3 months	01/04/04	Mean and Maximum
Chemical oxygen demand (mg/l)	W1	Every 3 months	01/04/04	Mean and Maximum
Suspended solids (mg/l)	W1	Every 3 months	01/04/04	Mean and Maximum
pH	W1 & Effluent Plant	Every 3 months	01/04/04	Minimum and Maximum
Iron (mg/l)	W1 & Effluent Plant	Every 3 months	01/04/04	Mean and Maximum
Chromium (mg/l)	W1 & Effluent Plant	Every 3 months	01/04/04	Mean and Maximum
Mercury (µg/l)	W1 & Effluent Plant	Every 3 months	01/04/04	
Nickel (mg/l)	W1 & Effluent Plant	Every 3 months	01/04/04	Mean and Maximum
Zinc (mg/l)	W1 & Effluent Plant	Every 3 months	01/04/04	Mean and Maximum

Table S2: Reporting of monitoring data (continued)				
Parameter	Emission point	Reporting period	Period begins	
Ammoniacal Nitrogen (mg/l)	W1	Every 3 months	01/04/04	Mean and Maximum
Water usage		Annually	Date of issue of Permit ^{note 4}	
Energy usage		Annually	Date of issue of Permit ^{note 4}	
Waste disposal and/or recovery.		Annually	Date of issue of Permit ^{note 4}	

Note 1 – calculation from sulphur content of fuel oil and fuel oil consumption.

Note 2 – for gas firing conditions

Note 3 – for oil firing conditions if period of operation exceeds 30 days in any year.

Note 4 – the first reporting period shall begin on the date of issue of the permit and end on 31/12/04.

Schedule 3 - Forms to be used

Table S3: Reporting Forms		
Media / parameter	Form Number	
Air	A1	
Water (excluding sewer)	W1	
Energy	E1	
Performance Indicators	PI1	
Waste Return	R1	
Water usage	WU1	

Schedule 4 - Reporting of performance data

Data required to be recorded and reported by Condition 4.1.3. The data should be assessed at the frequency given and reported annually to the Agency.

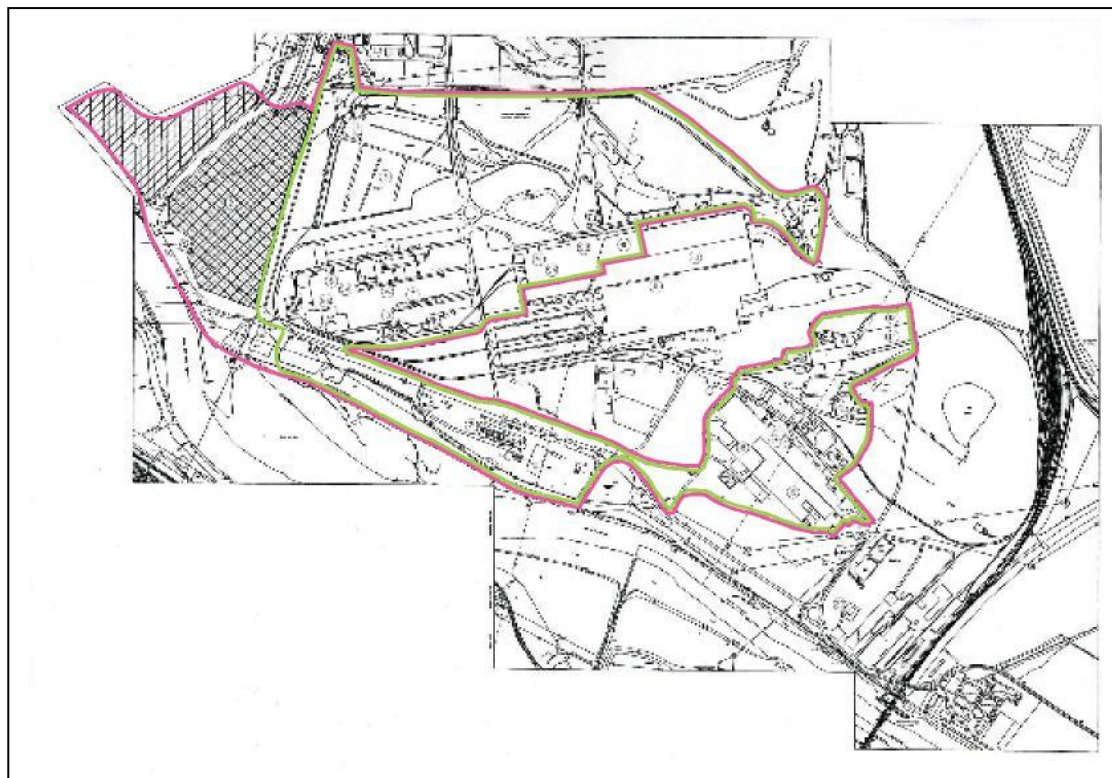
Table S4.1: Annual Production / Treatment	
Production of galvanised steel product (tonnes)	
Production of colorcoated steel product (tonnes)	
Total Production of coated steel products (tonnes)	

Table S4.2: Performance parameters			
Parameter		Frequency of assessment	Performance indicator ^{note 1}
Primary Energy Use		Annual	MW-hr / tonne
Total VOC emission to air as Carbon		Annual	Kg / tonne ^{note 2}
VOC Fugitive Emissions Value		Annual	%
Potable water use		Annual	m ³ / tonne
Non potable water use		Annual	m ³ / tonne
Quantity of Hazardous Waste		Annual	Kg / tonne
Quantity of Non Hazardous Waste		Annual	Kg / tonne

Note 1 – performance indicator should be referenced to total production of coated steel products unless otherwise stated.

Note 2 – VOC emissions should be referenced to production of colorcoated steel products only.

Schedule 5 - Site Plan



END OF PERMIT